900MHz phone freqs

Panasonic 900MHZ Cordless Freqencies:

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CH	BASE	HANDSET
01	902.100	926.100
02	902.130	926.130
03	902.160	926.160
04	902.190	926.190
05	902.220	926.220
06	902.250	926.250
07	902.280	926.280
08	902.310	926.310
09	902.340	926.340
10	902.370	926.370
11	902.400	926.400
^	^	^
59	903.870	927.870

900 MHZ CORDLESS TELEPHONE FREQUENCIES - - 902 - 928 MHZ NFM
Panasonic KX-
T9000 (60 Channels)
Base 902.100 - 903.870 Base frequencies (30Khz spacing)
Handset 926.100 - 927.870 Handset frequencies

CH	BASE	HANDSET	CH	BASE	HANDSET	CH	BASE	HANDSET
01	902.100	926.100	11	902.400	926.400	21	902.700	926.700
02	902.130	926.130	12	902.430	926.430	22	902.730	926.730
03	902.160	926.160	13	902.460	926.460	23	902.760	926.760
04	902.190	926.190	14	902.490	926.490	24	902.790	926.790
05	902.220	926.220	15	902.520	926.520	25	902.820	926.820
06	902.250	926.250	16	902.550	926.550	26	902.850	926.850
07	902.280	926.280	17	902.580	926.580	27	902.880	926.880
08	902.310	926.310	18	902.610	926.610	28	902.910	926.910
09	902.340	926.340	19	902.640	926.640	29	902.940	926.940
10	902.370	926.370	20	902.670	926.670	30	902.970	926.970

CH	BASE	HANDSET	CH	BASE	HANDSET	CH	BASE	HANDSET
31	903.000	927.000	41	903.300	927.300	51	903.600	927.600
32	903.030	927.030	42	903.330	927.330	52	903.630	927.630
33	903.060	927.060	43	903.360	927.360	53	903.660	927.660
34	903.090	927.090	44	903.390	927.390	54	903.690	927.690
35	903.120	927.120	45	903.420	927.420	55	903.720	927.720
36	903.150	927.150	46	903.450	927.450	56	903.750	927.750
37	903.180	927.180	47	903.480	927.480	57	903.780	927.780
38	903.210	927.210	48	903.510	927.510	58	903.810	927.810
39	903.240	927.240	49	903.540	927.540	59	903.840	927.840
40	903.270	927.270	50	903.570	927.570	60	903.870	927.870

For the single frequency model Panasonic phones, the color of the unit

often determines which of the above channels is used by the phone.
The following chart lists these allocations.

Color of Phone	CH	BASE	HANDSET
Blue	01	902.1000	926.1000
Hot Pink	02	902.1300	926.1300
Banana	03	902.1600	926.1600
Cerise	04	902.1900	926.1900
White	05	902.2200	926.2200
Off White	06	902.2500	926.2500
Gray	07	902.2800	926.2800
Fuschia	08	902.3100	926.3100
Shocking Pink	09	902.3400	926.3400
Chartreuse	10	902.3700	926.3700
Neon Purple	11	902.4000	926.4000
Black	59	903.8700	927.8700

V-TECH TROPEZ DX900 (20 CHANNELS)
905.6000 - 907.5000 TRANSPONDER (BASE) FREQUENCIES (100 KHZ SPACING)
925.5000 - 927.4000 HANDSET FREQUENCIES

CH	BASE	HANDSET	CH	BASE	HANDSET	CH	BASE	HANDSET
01	905.6000	925.5000	08	906.3000	926.2000	15	907.0000	926.9000
02	905.7000	925.6000	09	906.4000	926.3000	16	907.1000	927.0000
03	905.8000	925.7000	10	906.5000	926.4000	17	907.2000	927.1000
04	905.9000	925.8000	11	906.6000	926.5000	18	907.3000	927.2000
05	906.0000	925.9000	12	906.7000	926.6000	19	907.4000	927.3000
06	906.1000	926.0000	13	906.8000	926.7000	20	907.5000	927.4000
07	906.2000	926.1000	14	906.9000	926.8000			

GE 2-9925 (30 Channels)
Base 902.1250 - 903.9850 Base frequencies (60Khz spacing)
Handset 926.1250 - 927.9850 Handset frequencies

CH	BASE	HANDSET	CH	BASE	HANDSET	CH	BASE	HANDSET
01	902.1250	926.1250	11	902.7250	926.7250	21	903.3250	927.3250
02	902.1850	926.1850	12	902.7850	926.7850	22	903.3850	927.3850
03	902.2450	926.2450	13	902.8450	926.8450	23	903.4450	927.4450
04	902.3050	926.3050	14	902.9050	926.9050	24	903.5050	927.5050
05	902.3650	926.3650	15	902.9650	926.9650	25	903.5650	927.5650
06	902.4250	926.4250	16	903.0250	927.0250	26	903.6250	927.6250
07	902.4850	926.4850	17	903.0850	927.0850	27	903.6850	927.6850
08	902.5450	926.5450	18	903.1450	927.1450	28	903.7450	927.7450
09	902.6050	926.6050	19	903.2050	927.2050	29	903.8050	927.8050
10	902.6650	926.6650	20	903.2650	927.2650	30	903.8650	927.8650
31	903.9250	927.9250	32	903.9850	927.9850			

OTHER 900 MHZ CORDLESS PHONES

AT&T #9120 - - - - - 902.0 - 905.0 & 925.0 - 928.0 MHZ
OTRON CORP. #CP-1000 902.1 - 903.9 & 926.1 - 927.9 MHZ
SAMSUNG #SP-R912- - - 903.0 & 927.0 MHZ

United States Frequencies

Early systems used these frequencies for the base units:
1.665, 1.690, 1.695, 1.710, 1.725, 1.730, 1.750, 1.755, 1.770 MHz.

And for the handsets:
46.610, 46.630, 46.670, 46.710, 46.730, 46.770, 46.830,
46.870, 46.930, 46.970, 49.670, 49.770, 49.830, 49.845,
49.860, 49.875, 49.890, 49.930, 49.970, 49.990 MHz

Both base and handset (portable unit) used frequency modulation.
The 1665 kHz, 1690 kHz and 1710 kHz frequencies eventually became part of the expanded AM broadcast band.

The second-generation of analog cordless phones were 10-channel FM units operating in the 46.61 MHz to 46.97 MHz (base stations) and 49.67 MHz to 49.99 MHz under Part 15 47 CFR 15.233 using the following frequency pairs.

Base Frequency 46.610 MHz - Handset Frequency 49.670 MHz
Base Frequency 46.630 MHz - Handset Frequency 49.845 MHz
Base Frequency 46.670 MHz - Handset Frequency 49.860 MHz
Base Frequency 46.710 MHz - Handset Frequency 49.770 MHz
Base Frequency 46.730 MHz - Handset Frequency 49.875 MHz
Base Frequency 46.770 MHz - Handset Frequency 49.830 MHz
Base Frequency 46.830 MHz - Handset Frequency 49.890 MHz
Base Frequency 46.870 MHz - Handset Frequency 49.930 MHz
Base Frequency 46.930 MHz - Handset Frequency 49.990 MHz
Base Frequency 46.970 MHz - Handset Frequency 49.970 MHz

The so-called "49 MHz" cordless phones were rapidly adopted by consumers, resulting in heavy frequency congestion. The 49.830-49.890 MHz frequencies were and still are heavily used by other devices including baby monitors in continuous transmit mode.

15 frequencies were added bringing the total number of channels to 25.
43.71 MHz to 44.49 MHz (43.72 MHz to 44.48 MHz),
46.60 MHz to 46.98 MHz (46.61 MHz to 46.97 MHz),
48.75 MHz to 49.51 MHz (48.76 MHz to 49.50 MHz and
49.66 MHz to 50.0 MHz (49.67 MHz to 4 9.9 MHz).

Note that the frequencies overlap with the VHF low band business radio band, the military bands, the 49 MHz RC 49 MHz remote control device frequencies and 49 MHz short range devices (walkie-talkies, baby monitors, etc.)

The original 10 channel cordless phones used the
46.6 MHz - 47.0 MHz and 49.6 MHz to 50.0 MHz ranges only
(46.610 MHz - 46.970 MHz and 46.670 MHz - 49.990 MHz).

The handset/headset transmit frequencies for channels 17, 18, 20, 21 and 22 overlap with the 49.82-49.90 MHz frequencies, including frequencies used by baby monitors. When these cordless phones were popular, issues with interference due to baby monitors was common (and hearing your neighbor's phone call over your baby monitor was also common).

15.233 Operation within the bands 43.71-44.49 MHz, 46.60-46.98 MHz, 48.75-49.51 MHz and 49.66-50.0 MHz. (a) The provisions shown in this section are restricted to cordless telephones.

(b) An intentional radiator used as part of a cordless telephone system shall operate centered on one or more of the following frequency pairs, subject to the following conditions:

(1) Frequencies shall be paired as shown below, except that channel pairing for channels one through fifteen may be accomplished by pairing any of the fifteen base transmitter frequencies with any of the fifteen handset transmitter frequencies.

Base Frequency 43.720 MHz - Handset Frequency 48.760 MHz - Channel 1
Base Frequency 43.740 MHz - Handset Frequency 48.840 MHz - Channel 2
Base Frequency 43.820 MHz - Handset Frequency 48.860 MHz - Channel 3
Base Frequency 43.840 MHz - Handset Frequency 48.920 MHz - Channel 4
Base Frequency 43.920 MHz - Handset Frequency 49.020 MHz - Channel 5
Base Frequency 43.960 MHz - Handset Frequency 49.080 MHz - Channel 6
Base Frequency 44.120 MHz - Handset Frequency 49.100 MHz - Channel 7
Base Frequency 44.160 MHz - Handset Frequency 49.160 MHz - Channel 8
Base Frequency 44.180 MHz - Handset Frequency 49.200 MHz - Channel 9
Base Frequency 44.200 MHz - Handset Frequency 49.240 MHz - Channel 10
Base Frequency 44.320 MHz - Handset Frequency 49.280 MHz - Channel 11
Base Frequency 44.460 MHz - Handset Frequency 49.360 MHz - Channel 12
Base Frequency 44.400 MHz - Handset Frequency 49.400 MHz - Channel 13
Base Frequency 44.460 MHz - Handset Frequency 49.460 MHz - Channel 14
Base Frequency 44.480 MHz - Handset Frequency 49.500 MHz - Channel 15
Base Frequency 46.610 MHz - Handset Frequency 49.670 MHz - Channel 16
Base Frequency 46.630 MHz - Handset Frequency 49.845 MHz - Channel 17
Base Frequency 46.670 MHz - Handset Frequency 49.860 MHz - Channel 18
Base Frequency 46.710 MHz - Handset Frequency 49.770 MHz - Channel 19
Base Frequency 46.730 MHz - Handset Frequency 49.875 MHz - Channel 20
Base Frequency 46.770 MHz - Handset Frequency 49.830 MHz - Channel 21
Base Frequency 46.830 MHz - Handset Frequency 49.890 MHz - Channel 22
Base Frequency 46.870 MHz - Handset Frequency 49.930 MHz - Channel 23
Base Frequency 46.930 MHz - Handset Frequency 49.990 MHz - Channel 24
Base Frequency 46.970 MHz - Handset Frequency 49.970 MHz - Channel 25

The FCC quickly moved to authorize additional frequency space for cordless phones. With the 900 MHz ISM band 902-928 MHz becoming available next.

900 MHz cordless phones are still used today. Multiple duplex pair analog narrow FM, digital voice and various frequency hopping spread-spectrum or FHSS cordless phones became available for the 900MHz band.
If FHSS technology is used, base stations may transmit up to 1 watt ERP. This increase in transmitter power combined with the interference rejection capabilities of spread spectrum gave the higher-end 900 MHz cordless phones significant range. Unlike the older-generation models, 900 MHz cordless telephones never had a standardized channel plan or base and handset frequency pair or channel plan. This meant that manufacturers simply created their own, with widely differing channel steps, number of channels and other options. Even cheap analog FM 900 MHz cordless phones usually featured automatic channel selection. In other words, if the first channel pair was busy the system simply switched to the next clear channel.
This same technology was (and is) included in digital voice cordless telephones operating in the 900 MHz band, the 2.4 GHz band and the 5.8 GHz band as well as those using modern DECT technology.

The 2.4 GHz band became available shortly after 900 MHz and originally provided excellent results. However, the proliferation of devices operating in the 2.4 GHz band now means that 2.4GHz cordless phones often suffer from (or cause) interference and/or have reduced range compared to the other bands. The 5.8 GHz allocation was opened up to alleviate the congestion on 2.4 GHz. Many 5.8 GHz band cordless phones are sold today. Some "5.8 GHz" phones are actually cross-band and use 5.8 GHz for handset to base but use 900 MHz or 2.4 GHz for base-to-handset.

DECT (branded as "DECT 6.0" in the United States and Canada) actually

operates in the 1.8 GHz and 1.9 GHz band but provides interference free cordless phone service and is extremely adaptable for business, retail, industrial, office or home use. DECT phone systems may be expanded with numerous base stations, full-duplex intercoms and other systems in a cellular-like network. This includes PBX telephone systems in offices, retail stores, etc. DECT is effectively the convergence of cellular technologies and single-base/single-handset cordless phones.